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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,721

02/16/2005

Josef Ehrenfreund

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26748

7590

11/30/2007

SYNGENTA CROP PROTECTION, INC.  
PATENT AND TRADEMARK DEPARTMENT  
410 SWING ROAD  
GREENSBORO, NC 27409

EXAMINER

CHUNG, SUSANNAH LEE

ART UNIT

PAPER NUMBER

1626

MAIL DATE

DELIVERY MODE

11/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/524,721	Applicant(s) EHRENFREUND ET AL.	
	Examiner Susannah Chung	Art Unit 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 6, 7 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/16/05, 12/13/06</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1-9 are pending in the instant application.

#### ***Priority***

This application is a 371 of PCT/EP03/09111, filed 08/18/2003.

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) by application no. 0219612.9, filed 8/22/02 and 0310464.3, filed 5/7/03, in the UK Patent Office, which papers have been placed of record in the file. The application names an inventor or inventors named in the prior application.

#### ***Information Disclosure Statement***

The information disclosure statement (IDS), filed on 2/16/05 and 12/13/06 have been considered. Please refer to Applicant's copy of the 1449 submitted herewith.

#### ***Response to Election/Restrictions***

Applicant's election *with traverse* of a group encompassing the compound of claim 1, found in claims 1-5 and 8 in the reply filed on 11/2/2007 is acknowledged. Claims 6-7 and 9 are drawn to nonelected subject matter.

The traversal is based on the argument that the restriction is not complete and there is unity of invention. This is not found persuasive because of several reasons. First, it would be impossible under the time constraints to list every possible group in view of the Markush groups. Second, unity of invention is not present as seen by the reference cited in the previous office action, mail date 10/3/07, wherein prior art was found on the designated core. In addition, claims 6, 7, and 9 are drawn to compounds that do not share the same special technical feature or

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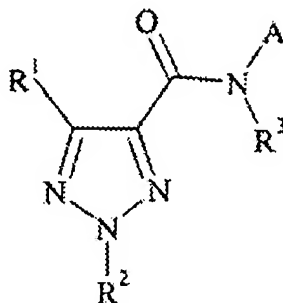
invention and have been deemed to be nonelected subject matter. Therefore, for the reasons stated, the lack of unity requirement is maintained.

Note that upon allowable subject matter being found, the scope of the elected subject matter will be expanded.

### *Scope of the Elected Invention*

Claims 1-9 are pending in this application.

The scope of the elected subject matter that will be examined and searched is as follows:



Compounds of formula (I), , depicted in claims 1-5 and 8.

### *Scope of Withdrawn Subject Matter*

Claims 6, 7, and 9 are withdrawn from further consideration by the examiner, 37 C.F.R. §1.142(b), as being drawn to a non-elected invention. The withdrawn subject matter is patentably distinct from the elected subject matter as it differs in structure and element and would require separate search considerations. In addition, a reference, which anticipates one group, would not render obvious the other.

### *Obviousness Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible

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harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

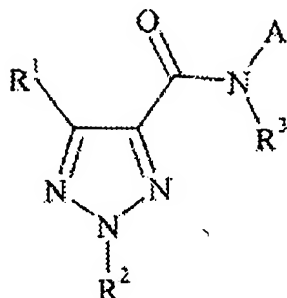
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

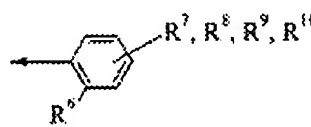
Claims 1-5 and 8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application Nos. 10/569,343 and 10/554,336. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

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Applicants instant elected invention teaches the compound of formula (I),



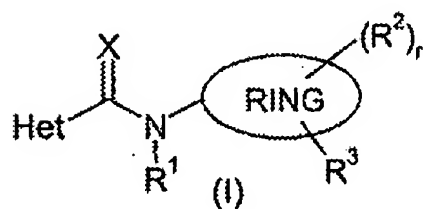
, depicted in claim 1, wherein **R1** is alkyl, **R2** is alkyl, **R3** is hydrogen;

**A** is , wherein **R6** is phenyl; **R7**, **R8**, **R9**, and **R10** are hydrogen.

These products are used for controlling microorganisms and preventing attack and infestation of plants (see claim 8).

Determination of the scope and content of the co-pending application

Application #10/569,343 teaches compounds of formula,



, wherein **Het** is a 5-membered heterocyclic ring containing three heteroatoms, i.e. 1,2,3-triazole, optionally substituted with alkyl; **X** is O; **R1** is hydrogen; **RING** is phenyl; **R3** is (CRaRb)*m*-Cy-(CRcRd)*n*-Y; **Cy** is phenyl; **Y** is Si; and **m**, **n**, and **r** are 0.

These products are used for controlling microorganisms and preventing attack and infestation of plants (see claim 9).

Ascertainment of the difference between the prior art and the claims (MPEP § 2141.02)

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The difference between the co-pending application and the instant application is that in the copending application is broader in scope than the pending application.

*Finding of prima facie obviousness – rationale and motivation (MPEP § 2142-2413)*

One skilled in the art would have found the claimed compound prima facie obvious because the instantly claimed compound and the compound in co-pending application claim the same compound. The motivation to make the claimed compounds derives from the expectation that structurally similar compounds would possess similar activity in controlling microorganisms and preventing attack and infestation on plants. Although, the instant application differs in that the **Het** group is specified as triazole, one skilled in the art would have found this variation obvious when faced with the co-pending application because both compounds are derived by the same process of making taught in the disclosures. In addition, since the compounds have the same utility, a skilled artisan would expect similar properties and results.

***Claim Rejections - 35 USC § 112, 1<sup>st</sup> paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement because the specification does not enable one skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims, for the reasons describe below.

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As stated in MPEP 2164.01(a), “there are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is “undue.”

The factors to be considered when determining whether a disclosure meets the enablement requirement of 35 USC 112, first paragraph, were described in In re Wands, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) as:

1. the nature of the invention;
2. the breadth of the claims;
3. the state of the prior art;
4. the relative skill of those in the art;
5. the predictability or unpredictability of the art;
6. the amount of direction or guidance presented [by the inventor];
7. the presence or absence of working examples; and
8. the quantity of experimentation necessary [to make and/or use the invention].

The eight Wands factors are applied to Claim 8 of the present invention below:

*(1) The Nature of the Invention*

Claim 8 is directed to:

Claim 8. (Currently Amended): A composition for controlling microorganisms and preventing attack and infestation of plants therewith, wherein the active ingredient is a compound of formula (I) [~~as claimed in~~] according to claim 1, together with a suitable carrier.

*(2) The Breadth of the claims*

Claim 8 will be given its broadest reasonable interpretation. The applicable rule for interpreting the claims is that “each claim must be separately analyzed and given its broadest



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reasonable interpretation in light of and consistent with the written description." See MPEP 2163(II)(1), citing In re Morris, 127 F.3d 1048, 1053-1054; 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). In view of this rule, Claim 8, which do not specify the many possible diseases that could strike the plants will be interpreted to encompass all possible diseases.

*(3) The state of the prior art*

The state of the art at the time of the filing of the application is that triazole compounds are effective in the treatment of certain fungicidal diseases that inflict plants, but the term "for controlling microorganisms and preventing attack and infestation of plants therewith," is not supported.

*(4) The relative skill of those in the art*

The level of skill in the art (pharmaceutical chemists, physicians) would be high.

*(5) The predictability or unpredictability of the art*

It is noted that the pharmaceutical art generally is unpredictable, requiring each embodiment to be individually assessed for physiological activity. In cases involving unpredictable factors, such as most chemical reactions and physiological activity, the scope of enablement varies inversely with the degree of unpredictability in the factors involved. In re Fisher, 427 F.2d 833, 839. Therefore, the more unpredictable an area, the more specific enablement is needed in order to satisfy the statute. Added to the unpredictability of the art itself is the question whether a compound of the present invention could be reliably and predictably extrapolated to treat and prevent all possible disorders that can inflict plants. There is no absolute predictability, even in view of the high level of skill in the art.

*(6) The amount of direction or guidance presented (by the inventor)*

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The specification in the present invention discloses that the instantly claimed compounds show fungicidal action against *Puccinia recondita*/wheat (Brownrust on wheat, *Podosphaera leucotricha*/apple (Powdery mildew on apple), *Venturia inaequalis*/apple (Scab on apple) and the like. (See specification pages 72-74).

*(7) The presence or absence of working examples*

As noted in the previous section, the specification discloses the general role of the instantly claimed compounds in fungicidal action to treat certain diseases that inflict plants, but does not show that it can prevent such grow from occurring or that it can treat all potential infestations inflicted by any microorganism.

*(8) The quantity of experimentation necessary (to make and/or use the invention)*

Given the absence of direction or guidance (or working examples) in the specification for the role of the compounds formula (I), it would cause a skilled artisan an undue amount of experimentation to practice this invention to determine which plants with which diseases would benefit from which of the many claimed compounds within the scope of the invention with a reasonable expectation of success. Therefore, the deletion of the term "for controlling microorganisms and preventing attack and infestation of plants therewith," will overcome this rejection.

***Claim Objections***

Claims 1-5 and 8 are objected to because of the following informalities: 1) The figures are too small. They must be enlarged so that the Printer can read them. 2) The variable R6 is understood to mean phenyl optionally substituted only. If another meaning is meant by the variable R6, alterations should be made to the commas and semicolons to further clarify what

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additional definitions R6 may be. In addition, the current title "Chemical Compounds" is objected to as vague and not adequately defining the invention.

Appropriate correction is required.

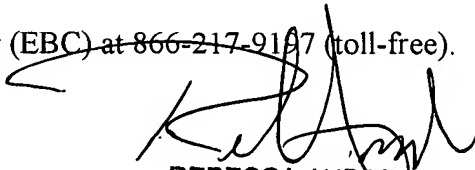
*Telephone Inquiry*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susannah Chung whose telephone number is (571) 272-6098. The examiner can normally be reached on M-F, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SLC

  
REBECCA ANDERSON  
PRIMARY EXAMINER

 Joseph K. McKane  
Supervisory Patent Examiner  
Art Unit 1626, Group 1620  
Technology Center 1600

Date: 29 November 2007